FORM PTO-1449 (Modified) LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	Attorney Docket No.: 18097-030200US Applicant: Punnonen et al. Filing Date: February 10, 1999	Application No.: 09/247,886 Group: 1632

Reference Designation — **U.S. PATENT DOCUMENTS** — Page 1

Examiner Initial	Document No.	Date	Name	Class	Sub-class	Filing Date (If Appropriate)
GL AA	5,939,250	08/17/99	Short	435	4	
GL AB	5,605,793	2/25/97	Stemmer, *et al.*	435	6	
GL AC	5,834,252	11/10/98	Stemmer, *et al.*	435	91.1	
GL AD	5,830,721	11/03/98	Stemmer, *et al.*	435	172.1	
GL AE	5,811,238	09/22/98	Stemmer, *et al.*	435	6	
GL AF	5,928,905	07/27/99	Stemmer, *et al.*	435	91.1	

FOREIGN PATENT DOCUMENTS

	Document No.	Date	Country	Class	Sub-class	Translation (Yes/No)
GL AG	WO 97/20078	5 June 97	PCT			
GL AH	WO 94/25608	10 Nov. 94	PCT			
GL AI	WO 97/35957	2 Oct. 97	PCT			
GL AJ	WO 96/23882	8 Aug. 96	PCT			
GL AK	WO 95/26718	12 Oct. 95	PCT			
GL AL	WO98/27230	25 June 98	PCT			
GL AM	WO 95/22625	24 Aug. 95	PCT			
GL AN	WO 96/33207	24 Oct. 96	PCT			
GL AO	WO 98/13487	2 April 98	PCT			

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

GL AP	Attridge et al., "Oral delivery of foreign antigens by attentuated Salmonella: consequences of prior exposure to the vector strain," *Vaccine* 15(2): 155-162 (1997).
GL AQ	Choate and Khavari, "Sustainability of Keratinocyte Gene Transfer and Cell Survival in vivo," *Human Gene Ther.* 8: 895-901 (1997).
GL AR	Christians, F.C. *et al.*, "Directed evolution of thymidine kinase for AZT phosphorylation using DNA family shuffling," *Nature Biotechnology* **17**:259-264 (1999)
GL AS	Courvalin, et al., "Gene transfer from bacteria to mammalian cells," *C.R. Acad. Sci.* III 18: 1207-12 (1995).
GL AT	Crameri, A. *et al.*, "Combinatorial Multiple Cassette Mutagenesis Creates All the Permutations of Mutant and Wild-Type Sequences," *Biotechniques* **18**:194-195 (1995)
GL AU	Crameri, A. *et al.*, "Construction and evolution of antibody-phage libraries by DNA shuffling," *Nature Medicine* **2**:100-103 (1996)
GL AV	Crameri, A. *et al.*, "DNA Shuffling of a family of genes from diverse species accelerates directed evolution," *Nature* **391**:288-291 (1998)
GL AW	Crameri, A. *et al.*, "Improved Green Fluorescent Protein by Molecular Evolution Using DNA Shuffling," *Nature Biotechnology* **14**:315-319 (1996)
GL AX	Crameri, A. *et al.*, "Molecular evolution of an arsenate detoxification pathway by DNA shuffling," *Nature Biotechnology* **15**:436-438 (1997)
GL AY	Deng. H., et al., "Sustainable cutaneous gene delivery," Nature Biotechnol. 15: 1388-1391 (1997).
GL AZ	Fox , M.E., et al. "Anaerobic bacteria as a delivery system for cancer gene therapy: in vitro activation of 5-fluorocytosine by genetically engineered clostridia," *Gene Ther.* 3: 173-178 (1996).
GL BA	Fritz, J.D., "Gene Transfer into Mammalian Cells Using Histone-Condensed Plasmid DNA," *Human Gene Therapy* 7: 1395-1404 (1996).

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BB	Gates, C.M. *et al.*, "Affinity Selective Isolation of Ligands from Peptide Libraries Through Display on a *lac* Repressor 'Headpiece Dimer'" *J. Mol. Biol.* **255**:1-14 (1995)
BC	Hilgers, A.R., et al., "Caco-2 Cell Monolayers as a Model for Drug Transport Across the Intestinal Mucosa," *Pharmaceutical Res.* 7(9): 902-910 (1990).
BD	Khavari and Krueger, "Cutaneous Gene Therapy," Adv. Clin. Res., Dermatologic Clinics, 15(1): 27-35 (1997).
BE	Minshull, J. and Willem P.C. Stemmer, "Protein evolution by molecular breeding," *Current Opinion in Chemical Biology* **3**:284-290 (1999)
BF	Oggoni, M.R. and Pozzi, G., "A host-vector system for heterologous gene expression in Streptococcus gordonii," *Gene* 169:85-90 (1996).
BG	Patten, P.A., et al., "Applications of DNA Shuffling to Pharmaceuticals and Vaccines," *Current Op. in Biotech.* 8: 724-733 (1997).
BH	Pisetsky, D.S., "Immune Activation by Bacterial DNA: A New Genetic Code," Immunity 5: 303-310 (1996).
BI	Sizemore, et al., "Attenuated Shigella as a DNA Delivery Vehicle for DNA-Mediated Immunization," *Science* 270:299-302 (1995)
BJ	Stemmer, W.P.C. and N.W. Soong, "Molecular breeding of viruses for targeting and other clinical properties," *Tumor Targeting* **4**:1-4 (1999)
BK	Stemmer, W.P.C. *et al.*, "Single-step assembly of a gene and entire plasmid from large numbers of oligodeoxyribonucleotides," *Gene* **164**:49-53 (1995)
BL	Stemmer, W.P.C., "DNA shuffling by random fragmentation and reassembly: *In vitro* recombination for molecular evolution," *Proc. Natl. Acad. Sci. USA* **91**:10747-10751 (1994)
BM	Stemmer, W.P.C., "Rapid evolution of a protien *in vitro* by DNA shuffling," *Nature* **370**:389-391 (1994)
BN	Stemmer, W.P.C., "Searching Sequence Space," *Biotechnology* **13**:549-553 (1995)
BO	Stemmer, W.P.C., "Sexual PCR and Assembly PCR," *The Encyclopedia of Molecular Biology*, VCH Publishers, New York pp. 447-457 (1996)
BP	Stemmer, W.P.C., "The Evolution of Molecular Computation," *Science* **270**:1510 (1995)
BQ	Zhang, J. *et al.*, "Directed evolution of a fucosidase from a galactosidase by DNA shuffling and screening," *Proc. Natl. Acad. Sci. USA* **94**:4504-4509 (1997)

EXAMINER shin-Lin Chen DATE CONSIDERED 9-28-00

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

USPTO-1449 (Modified)	Docket 018097-030200US	Application No.: 09/247,886
LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary)	Applicant: Punnonen et al.	
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Reference Designation — **U.S. PATENT DOCUMENTS** — Page 1

Examiner Initial	Document No.	Date	Name	Class	Sub-class	Filing Date (If Appropriate)
SL BR	5,338,665	08/16/94	Schatz et al.	435	6	

FOREIGN PATENT DOCUMENTS

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OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

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	Applicant: Juha Punnonen et al.	
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Reference Designation — **U.S. PATENT DOCUMENTS** — Page 1

Examiner Initial	Document No.	Date	Name	Class	Sub-class	Filing Date (If Appropriate)
GK AA	5,264,563	11/23/93	Huse	536	25.3	
GK AB	5,470,725	11/28/95	Borriss, *et. al.*	435	93	
GK AC	5,523,388	06/04/96	Huse	536	22.1	
GK AD	5,589,466	12/31/96	Felgner, *et. al.*	514	44	
GK AE	5,593,972	01/14/97	Weiner , *et. al.*	514	44	
GK AF	5,698,426	12/16/97	Huse	435	172.3	
GK AG	5,703,057	12/30/97	Johnston, *et. al.*	514	44	
GK AH	5,723,323	03/03/98	Kauffman, *et. al.*	435	172.3	
GK AI	5,763,192	06/09/98	Kauffman, *et. al.*	435	7.1	
GK AJ	5,770,434	06/23/98	Huse	435	252.33	
GK AK	5,783,386	07/21/98	Jacobs, Jr., *et. al.*	435	6	
GK AL	5,808,022	09/15/98	Huse	536	22.1	
GK AM	5,814,476	09/29/98	Kauffman, *et. al.*	435	69.1	
GK AN	5,817,483	10/06/98	Kauffman, *et. al.*	435	69.1	
GK AO	5,824,469	10/20/98	Horwitz, *et. al.*	435	6	
GK AP	5,824,514	10/20/98	Kauffman, *et. al.*	435	91.1	
GK AQ	5,830,696	11/03/98	Short	435	69.1	
GK AR	5,837,458	11/17/98	Minshull, *et. al.*	435	6	
GK AS	5,866,363	02/02/99	Pieczenik	435	69.1	
GK AT	5,871,974	02/16/99	Huse	435	69.7	
GK AU	5,955,358	09/21/99	Huse	435	328	
GK AV	5,958,672	09/28/99	Short	435	4	
GK AW	5,965,408	10/12/99	Short	435	91.1	
GK AX	5,976,862	11/02/99	Kauffman, *et. al.*	435	252.3	
GK AY	5,989,553	11/23/99	Johnston, *et. al.*	424	190.1	
GK AZ	6,001,574	12/14/99	Short, *et. al.*	435	6	
GK BA	6,004,788	12/21/99	Short	435	183	
GK BB	6,030,779	02/29/00	Short	435	6	
GK BC	6,054,267	04/25/00	Short	435	6	
GK BD	6,057,103	05/02/00	Short	435	6	
GK BE	6,096,548	08/01/00	Stemmer	435	440	

FOREIGN PATENT DOCUMENTS

	Document No.	Date	Country	Class	Sub-class	Translation (Yes/No)
GK BF	0 544 809 B1	06/09/93	Europe			
GK BG	0 563 296 B1	10/06/93	Europe			

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BH	WO 90/14424	11/29/0	PCT	C12N	15/00	[illegible]
BI	WO 92/06176	04/16/92	PCT	C12N	15/00	No
BJ	WO 94/06911	03/31/94	PCT	C12N	15/31	No
BK	WO 94/11496	05/26/94	PCT	C12N	15/00	No
BL	WO 96/31613	10/10/96	PCT	C12N	15/87	No
BM	WO 97/35966	10/02/97	PCT	C12N	15/00	No
BN	WO 98/13485	04/02/98	PCT	C12N	15/00	No
BO	WO 98/31816	07/23/98	PCT	C12N	15/55	No
BP	WO 98/31837	07/23/98	PCT	C12Q	1/68	No

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

BQ	Affholter, J. and Stemmer WPC, "Directed evolution of proteins and pathways by DNA shuffling", *Book of Abstracts*, 216th ACS National Meeting, Boston, August 23-27, BIOT-042
BR	Barry, *et.al.*, "Production of Monoclonal Antibodies by Genetics Immunization," *Short Technical Reports, in Biotechniques*, **16** (4):616 (1994)
BS	Barry, *et.al.*, "Protection against mycoplasma infection using expression-library immunization," *Nature* 377:632 (10/19/95)
BT	Beattie, *et.al*, "Cloning and characterzation of T-cell reactive protein antigens from *Listeria moncytogenes*," *Infection and Immunity* **58** (9):2792-2803 (Sept. 1990)
BU	Conroy, *et.al.*, "Immune response to a carcinoembryonic antigen polynucleotide vaccine," *Cancer Research* 54: 1164-1168 (March 1, 1994)
BV	Coppel et al., "Identification of a cDNA clone encoding a mature blood stage antigen of *Plasmodium falciparum* by immunization of mice with bacterial lysates," EMBO J. 3(2): 403-407 (1984).
BW	Hedstrom, *et.al*, "Prospects and strategies for development of DNA vaccines against malaira," *59th Forum in Immunology* pp 476-482
BX	Howard, Abstract No. 528494, "Chemistry of the future: Exploitation of the power of biology," Abstracts of Papers of the *Amer. Chem. Soc.*, V216, 3 (Aug. 23, 1998).
BY	Khusmith. et al., "Protection Against Malaria by Vaccination with Sporozoite Surface Protein 2 Plus CS Protein," *Science* 252: Reports, 715-718 (1991).
BZ	MacKay et al., "Production of immunologically active surface antigens of hepatitis B virus by Escherichia coli," *Proc. Natl. Acad. Sci.* USA 78(7): 4510-4514 (1981).
CA	Pascopella et al., "Identification of a Genomic Fragment of Mycobacterium tuberculosis Responsible for In Vivo Growth Advantage, *Inf. Agents and Dis.* 2: 282-284 (1994).
CB	Pascopella et al., "Use of In Vivo Complementation in Mycobacterium tuberculosis to Identify a Genomic Fragment Associated with Virulence," *Inf. and Imm.* 62(4): 1313-1319 (1994).
CC	Punnonen, "Evolution of DNA vaccine vectors by gene shuffling," The First Gordon Research Conference on Genetic Vaccines/DNA Vaccines, Plymouth State College, Plymouth. N.H. (1997) (one page).
CD	Punnonen et al., "Evolution of Genetic Vaccines by DNA shuffling," Keystone Symposia on Molecular and Cellular Biology, Molecular Aspects of Viral Immunity, Tamarron, Colorado (1998) (one page).
CE	Stemmer, "DNA sequence evolution by sexual PCR," Experientia (Basel, Switzerland), S09-04, 52(abstract): A25, 28th Annual Meeting of the Swiss Societies for Exp. Biology (1996).
CF	Stemmer, "Directed evolution of proteins, pathways, episomes and viruses by DNA shuffling," *FASEB J.*12(8): A1303, Meeting of the Amer. Soc. for Biochem. and Mol. Biol., Washington, D.C. (1998).
CG	Stemmer et al., "Molecular evolution of genes and pathways by DNA shuffling," *FASEB J.* 11(9): A1124, Annual Meeting of the American Society for Biochemistry and Molecular Biology, San Francisco, California (1997).

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GM CH	Tang et al., "Genetic immunization is a simple method for eliciting an immune response," *Nature* 356: 152-154 (1992).
GM CI	Ugen et al., "DNA Inoculation as a Novel Vaccination Method against Human Retroviruses with Rheumatic Disease Associations," *Immunol. Res.* 13:154-162 (1994).
GM CJ	Ulmer and Liu, "ELI's coming: expression library immunization and vaccine antigen discovery," *Trends in Microbiology* 170: 4(5) : 170-171 (1996).
GM CK	Ulmer et al., "Heterologous Protection Against Influenza by DNA Encoding a Viral Protein," *Science* 259: 1745-1749 (1993).
GM CL	Wang et al., "DNA Inoculation Induces Cross Clade Anti-HIV-1 Responses," *Proc. Natl. Acad. Sci.* USA 90: 4156-4160 (1993).
GM CM	Wang, et al., "Gene inoculation generates immune responses against human immunodeficiency virus type 1," *Proc. Natl. Acad. Sci. USA* 90:4156-4160 (1993)
GM CN	Williams et al., "Genetic Infection Induces Protective In Vivo Immune Responses," *DNA and Cell Biology* 12(8): 675-683 (1993).
GM CO	Williams et al., "Immunotherapeutic Strategies Targeting Rheumatoid Synovial T-Cell Receptors by DNA Inoculation," *Immunol. Res.* 13: 145-153 (1994).
GM CP	Xiang and Ertl, "A simple method to test the ability of individual viral proteins to induce immune responses," *J. of Virological Methods* 47: 103-116 (1994).
GM CQ	Zanelli et al., "Epitope Mapping of Human Thyroid Peroxidase Defined Seven Epitopes Recognized by Sera from Patients with Thyroid Pathologies," *Cell. and Mole. Biol.* 39(5): 491-501 (1993).
CR	
CS	
CT	
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